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DECEMBER 1955

FIREMEN

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SIXTIETH YEAR · NATIONAL FIRE PROTECTION ASSOCIATION

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WOOSTER *VARI-A-FOG

A prize-winning name for a praise-winning nozzle

Now — a nozzle that does everything you want a nozzle to do — and do it more effectively, faster, easier. The new Wooster Vari-A-Fog meets every fire-fighting situation with the right answer right at your finger tips.

You simply dial your stream pattern — from a 90° wide angle right down to a straight stream, in less than one complete turn of the barrel. Positive, click-stop settings give you a full choice of dense fog patterns without hollow spots, and a solid straight stream projection of 125 feet at 100 GPM. Lower GPM streams are available for mop up by turning barrel below straight stream setting.

When you examine and operate the Wooster Vari-A-Fog you will agree that this is the new standard for all-purpose nozzles. Write direct or ask your Wooster Brass representative for a demonstration in your department.

THESE ARE THE IMPORTANT FEATURES

1. **Chromed hard bronze baffle plate for stream pattern control.**
2. **Perforated edge for dense, uniform fog pattern — no hollow spots.**
3. **Non-slip, heavy duty rubber grip extends over nozzle end for sure impact protection.**
4. **Five positive click-stop stream positions. Straight stream, 15°, 30°, 60° and 90° fog. Mechanism entirely enclosed — nothing to catch — no way to freeze.**
5. **Smooth, easy turning at all pressures.**
6. **Rugged and rigid stream setting indicator.**
7. **Ball Valve shut-off control. Easy acting and non-locking at all pressures.**
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9. **Full 1-inch, non-interrupted waterway. Delivers water to discharge without intermediate chamber friction loss.**
10. **Floating ball action is self-sealing and self-compensating for wear.**
11. **Strong one-piece body for stability and streamlined appearance.**
12. **Unique double-stop design provides positive valve alignment in open and closed position.**

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1½" nozzle regularly available in 2 GPM ratings:

(a) 30° fog at 100 PSI — 125 GPM
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Lower GPM nozzles available on special order.

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Rockford, Illinois, with a booming population of over 100,000 has a high concentration of valuable manufacturing properties. To protect its growing industrial and residential areas, Rockford recently purchased two new B-85 Model Mack pumpers to bring the total of Mack fire apparatus bought since 1940 up to eight units.

Rockford is only one of many communities throughout the nation modernizing with new B-Model Mack apparatus. Nor is Rockford alone in the discovery that this new line offers the most outstanding all-round performance any fire apparatus can deliver.

The B-Model Mack line has a completely redesigned chassis—for even greater strength and easy handling—and Thermodyne® overhead valve engines for more usable fire-fighting power. The B-Model styling is new, too, providing unmatched visibility, personnel safety and easy accessibility without departing from traditional Mack ruggedness and simplicity of construction.

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TRIPLE COMBINATION PUMPERS—500 TO 1250 GPM . . . SQUAD AND HOSE WAGONS . . . 65', 75' AND 85' AERIALS . . . COMBINATION LADDER TRUCKS

with complete *Automatic* protection service

JAMES BUTE COMPANY gets:

1 better protection against FIRE and BURGLARY

2 round-the-clock supervision of industrial processes and

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SAVES $5,116 A YEAR

"Supplementing your fire and burglary protection with central station supervision of critical industrial processes enables us to obtain increased security with a saving of $5,116 a year."

L B Odell

Vice President

Round-the-clock checking of critical production processes has been combined with ADT Central Station Burglar Alarm, Automatic Fire Alarm, and Sprinkler Supervisory and Waterflow Alarm Services, to give James Bute Company, paint manufacturers, Houston, Texas, *complete* automatic protection.

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Mr. Odell's statement is typical of the comments of leading executives who know that ADT Automatic Services give better protection for property, profits and employees' jobs than can be obtained by other methods, *and at less expense.*

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Prepared for Firemen and Community Officials responsible for selecting fire protection equipment

Are you a fireman, striving to get the "last ounce" of fire-fighting effectiveness from your equipment? Or a public official concerned with fire protection and equipment selection?

In both cases, this new bulletin will interest you!

First, it shows how American's policy helps you get the *particular* apparatus best suited to *your* community —by offering the widest choice of commercial chassis . . . choice of pumps . . . and choice of body styles and equipment.

Four handsome, powerful trucks are shown to illustrate popular standard and custom-built combinations. And last, but not least, you'll find cutaway photographs of original, *exclusive* engineered features that add *extra* life, efficiency and fire-fighting power to these outstanding American trucks.

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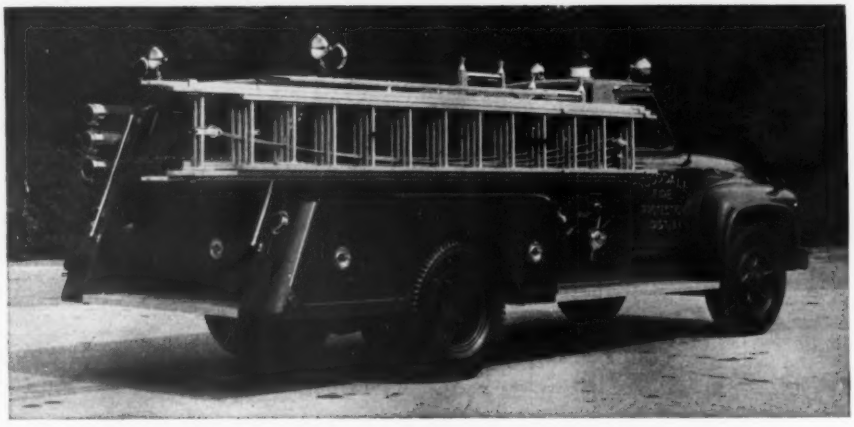
If you're thinking of a new fire truck for your department write the Volunteers at Wooddale, Ill.

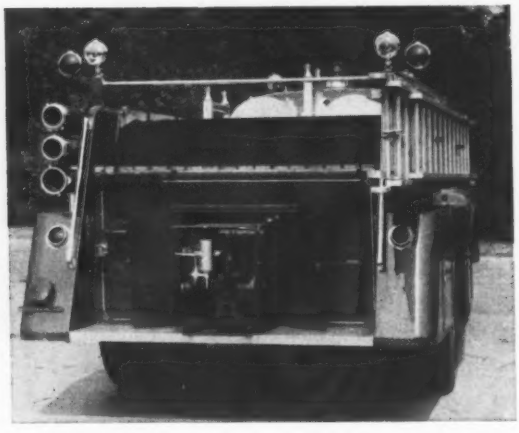
Shown above is their new Champion, the second Darley-built Fire Apparatus purchased by this Department.

They'll be glad to tell you, man to man, why they selected Darley Champion Fire Apparatus over all other makes.

The Wooddale fire fighters are justly proud of their new Champion and they know from actual experience what a dependable fire truck it is.



This Champion Carries A Full Complement of Fire Fighting Equipment



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CLASS A UNDERWRITER RATING

A Class A 500 gallon pumper which fully conforms to all specifications of the National Board of Fire Underwriters and All State Insurance Bureaus. Delivers large overcapacity: 700 G.P.M. pumping at suction and 1,000 G.P.M. from a hydrant with average or better flow.

The pump is the Darley Champion Type SH500 manufactured exclusively by W. S. Darley & Co. and used on all Champion Fire Apparatus. A 3-stage centrifugal with superior engineering features which guarantee brilliant performance throughout the entire range of pumping requirements for fire fighting.

The SH Series Champions are double duty fire pumps which provide the complete range of volume performance for heavy streams plus the fire smashing efficiency of high pressure fog with 60 gallons per minute at 850 lbs. of pressure at the pump. Actual tests show the SH pump develops pressure to 1,000 lbs.

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Its very high tensile strength, flexibility, resistance to stretch, excellent dimensional stability and non-melting qualities permit:

1. **A lighter weight but very strong hose.**
2. **A more flexible hose.**
3. **A hose which can be exposed to greater heat.**
4. **A hose which racks and handles easier.**
5. **A hose which saves space because it folds tighter.**

Since it need not be heat stretched, it is an economic fiber for this application.

Other applications in which FORTISAN-36 is proving highly efficient are V-belts, aircraft and other hydraulic hose, conveyor belts, plastic laminates, filters, paper reinforcement, tarpaulins and webbing.

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*Reg. U. S. Pat. Off.

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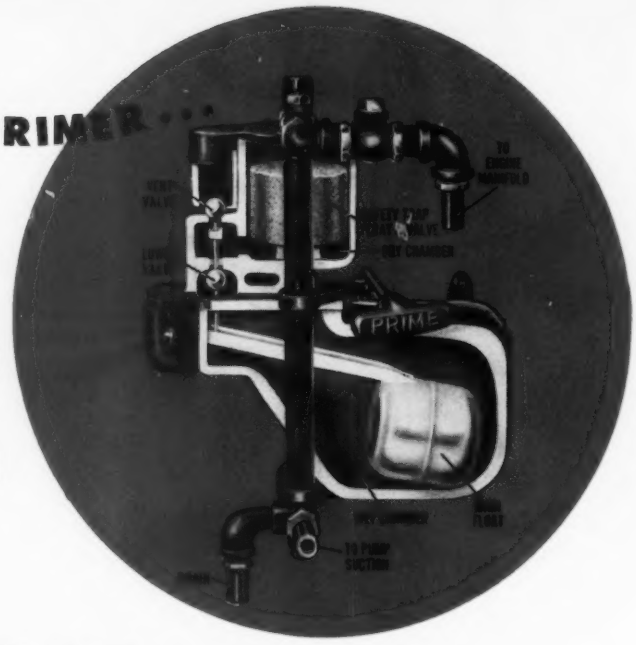
GIVES YOU 100% FASTER PRIMING

on Barton-American FIRE PUMPS



FEATURED ON BOTH MIDSHIP AND FRONT-MOUNTED PUMPS—KEEPS PACE WITH NEW, MORE POWERFUL TRUCK ENGINES

Here's a primer that *cuts priming time in half* on most new pumpers! And it utilizes the same time-tested engine vacuum principle that has proved its dependability for over a third of a century.

Not affected by engine age or wear, this primer always operates with original "like new" efficiency. Trouble-free in basic design and construction, it eliminates the nuisance of maintenance and lubrication required by ordinary primers. On standard installations it gives you frost-proof protection.

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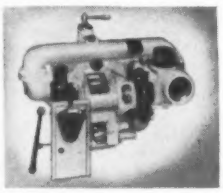
In every way, this new model primer keeps pace with the larger displacement engines now in common use on pumpers . . . and it's just one of the superior features you get on Barton-American Fire Pumps.

For complete details, write for Front-mounted Pump Bulletin 8330-B or Midship Pump Bulletins 8733 and 8734—and mention your interest in faster priming!



Choose either a front or midship pump—both include faster vacuum priming system.

AMERICAN-MARSH PUMPS

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In Canada:
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Firemen

Volume 22 — Number 12

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PAUL R. LYONS — ASSOCIATE EDITOR
HENRY S. GERE — ADVERTISING MANAGER

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Cover Picture

Within three minutes after a B-26 bomber crashed in a residential district of East Meadow, Long Island, New York, fire fighters were applying combined extinguishing agents on the involved plane and a nearby dwelling. The bomber, serving as a tow target plane, was returning to Mitchel Air Force Base after a routine flight. It suddenly went into a "flat spin" and crashed in front of one dwelling on a heavily populated residential street, bursting into flames on impact and involving the dwelling with fire.

Members of the Mitchel Air Force Base Fire Department saw the crash and an alarm was sent out immediately to the control tower. Response included the Base Fire Department and a medical crew, the paid and volunteer fire departments of East Meadow, Types 0–10, 0–1, 0–11A crash trucks, a rescue truck, three 750 gpm pumpers and two 500 gpm pumpers from East Meadow and 3 ambulances. One hundred fire fighters participated in the attack.

The fire was knocked down with 2,000 pounds of carbon dioxide discharged at 300 psi, then blanketed with 500 gallons of pre-mixed foam and 2,000 gallons of fog-foam, to cover the large quantities of gasoline spilled from ruptured tanks. Burning magnesium was hit with straight streams of foam to force it away from the involved area, then covered with a foam blanket until it burned completely. In addition to evacuating people from nearby dwellings fire fighters also operated 2½-in. lines to extinguish the dwelling fire and to protect exposures.

Pilot and co-pilot were killed upon impact, but none of the family living in the dwelling was injured. This month's cover picture shows fire fighters going into action. Men at left are about to investigate dwelling for possible casualties. (*New York Daily News Photo.*)

Firemen's Training

The continual quest for the best methods of controlling and extinguishing fire is reflected in this year's survey of firemen's training in the United States and the Provinces of Canada. Each year, as FIREMEN magazine publishes this report, there are some noticeable trends which directly affect the status of the fire service. More fire training centers will be built within the near future and more firemen will be participating in "higher level" education. If there are any members of the fire service who want things to stay "just as they are," they will be left far behind the large group of fire fighters who are talking advantage of the rapidly improving training techniques and facilities now available throughout North America.

Farm Committee Meets

Members of the NFPA Committee on Farm Fire Protection held the 1955 meeting at the University of Connecticut in Storrs, October 26 and 27. Headed by Chairman L. G. Keeney and Secretary Warren Y. Kimball, the Committee also visited the training center built by volunteer firemen in Willimantic (see FIREMEN for May, 1955), and as shown above, inspected several farm properties in the vicinity, including a dairy farm and a poultry farm. Local fire departments demonstrated their methods for operating water in tank trucks for the protection of such rural properties.

State and Provincial Firemen's Training—1955

By Paul R. Lyons, Associate Editor

THE economic law which states that "demand develops supply" may be usefully applied in evaluating some of the activities of the fire service. In the field of firemen's training, for example, demand is causing some important developments throughout North America.

There is a demand for "college level" instruction and several universities within the past year have started to supply this necessary commodity. There is a demand for more State training centers and action is being taken in a number of States which will bring such new facilities into existence. There is the ever-present demand for new training subjects, for new methods of instruction, and for variety in the training programs. All of these changes are indicated in this year's survey of firemen's training in the United States and Canada, during the fiscal year ending June 30, 1955. The editors of FIREMEN magazine are indebted to various State Vocational Education officers, and to the Fire Marshals of the Canadian Provinces, who supplied the information for this report.

The report on these pages includes only the subjects and attendance reported as part of State and Provincial training programs, usually conducted in cooperation with Vocational Departments of Education. Thousands more fire fighters received training from local instructors in departmental, county and regional fire schools, and in schools or annual meetings conducted by state fire chiefs and firemen's associations.

Where names of states or provinces are mentioned in this article, the reference, unless otherwise stated, is to the annual fire school or training program conducted in cooperation with State or Provincial Vocational Departments of Education, or State colleges and universities.

In every State fire school or training program, considerable attention is given to the important fundamentals which are so essential to "rookies" and are equally important to experienced men who attend "refresher" courses. In this general field of instruction are included: handling hose and ladders, pump operation and hydraulics, ventilation, salvage, and basic principles of fire fighting.

Limited space prevents adequate description of all of the training programs. The sections on the following pages offer only a brief survey of some of the highlights of firemen's training. The editors hope that the survey will encourage many more fire fighters to take advantage of the progressive instruction now available throughout North America.

TOTAL FIREMEN RECEIVING TRAINING*
(State and Provincial Programs Only)
Year Ending June 30, 1955

State		State	
Alabama	1,085	New Mexico	200
Arkansas	4,968	New York	8,480
California	5,806	No. Carolina	600
Colorado	5,126	No. Dakota	705
Connecticut	998	Ohio	4,888
Delaware	148	Oklahoma	1,571
Florida	1,072	Oregon	130*
Georgia	5,192	Pennsylvania	*
Idaho	240	So. Carolina	1,388
Illinois	*	So. Dakota	*
Indiana	906	Tennessee	527
Iowa	4,132	Texas	3,920
Kansas	*	Utah	406
Kentucky	1,627	Vermont	*
Louisiana	*	Virginia	600
Maine	120	Washington	8,336
Maryland	2,034	W. Virginia	725
Massachusetts	684	Wisconsin	615
Michigan	2,034	Wyoming	159
Minnesota	1,826	Total U. S.	83,742
Mississippi	1,194		
Missouri	3,910	Ontario	3,731
Nebraska	6,772	Saskatchewan	8,171
Nevada	506	Br. Columbia	1,288
New Jersey	112	Grand Total	96,932

*Complete total not available for this edition.

ANNUAL STATEWIDE FIRE SCHOOLS
1955

State	Firemen Attend.	No. Years Held
Alabama	154	19
Arkansas	116	8
Colorado	674	22
Connecticut	224	14
Delaware	58	7
Florida	206	26
Georgia	500	4
Idaho	240	6
Indiana	311	31
Iowa	490	31
Kentucky	616	32
Maryland	269	22
Michigan	419	27
Minnesota	210	27
Mississippi	93	4
Missouri	214	
Montana	76	15
Nebraska	170	18
New Hampshire	386	1
No. Carolina	600	27
Ohio	195	10
Oklahoma	240	22
Tennessee	248	12
Texas	1,114	26
Utah	406	
Virginia	125	9
Washington	92*	
W. Virginia	205	23
Wisconsin	107	
Total	8,758	

Administration

Perhaps the most significant development in firemen's training during the past year has been the growing attention given to "college level" training. Many chief officers and other members of the fire service have expressed their desire for such "higher level" training in fire administration and related subjects. Today's fire chief must cope with a growing variety of administrative problems including the selection, supervision and training of his officers and men, and proper administration of the funds granted to his department for personnel, apparatus and equipment. It follows, naturally, that the increasing demand for good training in fire

Students at the Kentucky Fire School practice with an emergency suction basin, made by lashing ground ladders together and using salvage covers to retain water.

The North Carolina Pump School is held at the training grounds of the Charlotte Fire Department. The Pump School requires training participation for four years before certificate of completion is awarded. Intensive post-graduate courses in a variety of subjects are also offered for paid and volunteer firemen in the State.

administration has brought constructive reaction from several major universities.

The first to sponsor such a program was the University of Southern California which developed a course in fire administration as part of the Public Administration Course conducted by the university (see FIREMEN for November, 1954). This year, the California Department of Education conducted administration courses in San Mateo, Oakland, Los Angeles, and Compton, under the direction of Thomas S. Ward, Supervisor of Fire Training. A total of 64 fire chiefs participated in these classes.

Also significant was the beginning of a similar fire administration training program at the School of General Studies, Queens College, Flushing, New York. Classes for this course started this Fall and are arranged to permit firemen to attend identical afternoon and evening sessions (see FIREMEN for September, 1955).

As announced in the November issue of FIREMEN, Boston University in Massachusetts, plans to conduct a similar course for fire chiefs and other fire department members in the Spring of 1956. This course will also feature identical afternoon and evening sessions, and will be incorporated as part of the program of the university's School of Public Administration. A special committee of fire chiefs and municipal officials is assisting in the preparation of the program.

In addition to the above courses, fire training programs in Alabama, Arkansas, Connecticut, Florida, Idaho, Indiana, Iowa, Kentucky, Mississippi, North Carolina, Oklahoma, Ontario, Tennessee, Washington and Wisconsin devoted special sessions to administration training for fire chiefs and other fire officers. Iowa, in particular, conducted special classes for officers of volunteer fire departments.

Instructor Training

Proper training of instructors who, in turn, will train fire fighters is now a regular feature of almost every State or Provincial training program. The stress given to such training varies among the different states, but there is a general appreciation of the need for sound instruction methods.

For example, in Alabama, a special course was held for the officers of the Mobile Fire Department which stressed job relations between superiors and the men under their command; how to teach; and job analysis for teaching. The instructors' course in Arkansas stressed leadership and training in addition to general fire administration and other subjects. Florida held a five-day training conference for fire chiefs and instructors. A four-week course for fire officers held in Boise Jr. College in Idaho included instruction in teaching techniques, visual aids and human relations training.

In New York State the 6th Annual Fire Instructors Conference was held in Rochester and was attended by 75 county fire instructors as well as representatives of industry, state institutions and training officers of paid fire departments. The week-long course was divided into two sections — one instructional and one developmental. The first group received basic, intermediate and advanced instructor training. The second group, consisting of county fire instructors who had attended previous conferences, developed outlines for future graduate courses. Most recommended was a course in fire inspection, so the Bureau of Fire is now developing a 60-hour course in this subject to be presented during the 7th Instructors' Conference.

California, Georgia, Indiana, Maryland, Michigan, North Dakota, Oklahoma and Texas also gave considerable attention to this subject of instructor training.

Flammable Liquids Fires

Another general subject taught throughout the United States and Canada was the control of flammable liquids fires. In many fire schools and state training pro-

The fire school at the University of Maryland featured classes in radiological monitoring. Here students work on a map showing one portion of the City of Baltimore. An atomic weapon is assumed to have exploded in the harbor, contaminating the city area. Under the map are several radioactive materials, loaned by the Atomic Energy Commission plant in Oak Ridge, Tennessee. Students, operating as teams, use Geiger counters, dosimeters and ionization chambers to detect and measure radioactive areas, then telephone information to a simulated control center where an over-all map of "contaminated" area of the City is plotted.

Class in pump operation at the West Virginia Research and Training Center at the University of Morgantown. (See description of Center in November, 1955, FIREMEN.)

grams, fire fighters participated in actual combat of such fires. However, one notable program was conducted in California when an oil fire control school was held in Bakersfield March 24 to 26. This school was sponsored by the California Fire Training Program, the California Bureau of Industrial Education, and the State Department of Education in cooperation with the Kern Fire Department and the Weston Oil and Gas Associations. Demonstrations and participating drills in extinguishment and control of fires and flammable liquids and liquefied petroleum gas were conducted at the training grounds of the Standard Oil and Union Oil Companies. More than 500 persons from seven western states and two continents registered for the school, and certificates were awarded to those who completed the training program.

Large scale flammable liquids fires were also conducted at the Iowa State Training School and in fire schools of Kentucky, Missouri, New Hampshire, North Dakota and Oklahoma. Fire fighters at the Missouri state fire school observe the use of the "Giraffe" a telescopic tower used for directing master straight and fog streams.

Arson

While various fire training programs included some instruction on arson detection and investigation, two outstanding schools on this subject were conducted in California and Indiana. The former state now conducts a fire and arson investigation short course which was held this year in Berkeley and on the Los Angeles campus of the University of California. A total of 236 arson investigators from fire departments, sheriffs' offices and many other organizations attended these two courses. In Indiana, the well-known, 40-hour Arson Investigators Seminar was conducted at Purdue University in Lafayette with the total of 350 men attending from many of the States and Provinces.

Radio

Proper use of radio communications was given attention in training programs of Arkansas, Colorado, Texas and Washington. In Arkansas, radio communications were incorporated in a special fire officers' course conducted by Harry H. Wolff, of the Western Actuarial Bureau, Chicago, Illinois. In Colorado, as part of the State training program, the Denver fire department conducted radio schools for fire departments of three counties which surround that city and which operate as part of a mutual aid network. In Texas, radio communications were applied practically in "combined operations" by fire fighters who were extinguishing fires in a variety of hazardous materials.

In New York State, fire departments in the various counties who have two-way radio, received instruction in radio procedure from Bureau of Fire representatives. This consisted of a 3-hour course, developed for the purpose of qualifying volunteer firemen to operate radio transmitters and receivers. The course is designed to lead to the standardizing of radio procedure in fire departments throughout the State.

Aircraft Fire Fighting

Control of fire in crashed aircraft was a training subject in Delaware, Minnesota, New Hampshire and Texas. In Delaware, the trainees operated on fires in "mockup" of planes and in wrecked automobile chassis. The New Hampshire State Fire School was conducted at Grenier Field Air Base where demonstrations of crash fire fighting work were conducted. The Minnesota State Fire School included a demonstration of aircraft crash fire fighting by the 514th Air Defense Group stationed at Fort Snelling. In Texas, in addition to aircraft crash fires, the fire fighters handled fires in flammable liquids, rubber, chemicals and liquefied petroleum gas.

Inspection Procedure

Many fire training programs featured extensive instruction in inspection procedure. In Maryland a short course in this

Firemen's training in the State of Washington is sponsored by the State Fire Chiefs' and Firemen's Associations in cooperation with the State Board for Vocational Education. One of the special classes during the past year featured instruction on resuscitation for these "practical nurse" trainees. Altogether 252 regular classes of various fire control subjects were held for officers and men in the fire departments of the State.

(*Right*) One of the highlights of firemen's training was this "oil fire control school" held in March at Bakersfield, California. Some 500 persons from two continents and seven states registered for the classes and participated in combat of flammable liquids fires. This picture shows some of the trainees knocking down a simulated tank truck fire, supposedly caused by a leaking valve.

subject included an address by NFPA Chief Engineer, Horatio Bond. Students taking the course were required to use the NFPA "Inspection Manual" as a textbook. Ontario held two "fire inspection practices courses" each of five days (40 hours) duration. The NFPA "Inspection Manual" not only is used as a basic textbook for the course but a copy is presented to each candidate completing the instruction. A total of 66 municipal and industrial fire department inspectors received certificates in this course. Other states which devoted special classes to instruction in inspection procedures included Arkansas, Connecticut, Florida, Idaho, Iowa, Kentucky, Michigan, Mississippi, North Dakota and Oklahoma.

Pump Operation

Operation of fire department pumpers is a basic course in practically every training program. However, two pump operation schools deserve special attention. The Maryland Fire College again held five special courses on pump operation. Instruction was given by representatives of the manufacturers of Seagrave, Hale, American-La France, Waterous, and American-Marsh pumps. A total of 214 fire department members completed the various courses. The North Carolina Fire College is conducted on the training grounds of the Charlotte Fire Department in cooperation with the North Carolina State Firemen's Association. Pump instruction is given over a period of three years at the end of which time fire fighters receive their certificates of completion. In addition to pump instruction other basic courses are taught at the Fire School and a special post-graduate course is held for fire officers and others who have completed the basic courses.

Fire Schools

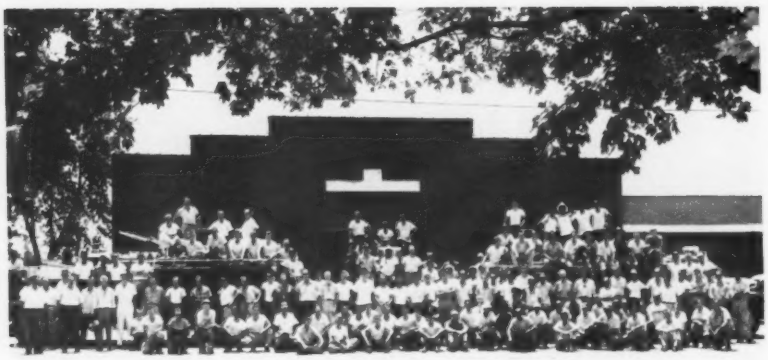
One of the most important highlights of fire service activities during the past year was the opening of the Pennsylvania Fire School at Lewistown (see FIREMEN for April, 1955). At present this training center presents the most modern and most complete facilities available to firemen participating in a State training program. However, there have been significant developments in other states. For example, Tennessee expects to open a new training center early in 1956. In Mississippi funds are to be requested from the state legislature for the development of a new firemen's training center. Fire service authorities in Ohio are currently making a survey of existing training centers with the hope that a modern installation may soon be available in that state. South Carolina, Indiana, Iowa and Delaware are among the other states where definite consideration is being given to the establishment of future firemen's training centers.

As reported in the May, 1955, issue of FIREMEN magazine, the training center built by volunteers in Willimantic, Connecticut, completed its first year of operation this past June. The advisory committee responsible for the creation and operation of this training center has now been granted funds from the Connecticut State Legislature. More extensive facilities will be built in Willimantic through this appropriation and funds allocated through the Federal Civil Defense Administration.

This is the "Giraffe," a hydraulic, movable aerial platform which was demonstrated during the Missouri Fire Conference, as a means of directing master fog and straight streams. It is made by the Pitman Manufacturing Company, 300 West 79th Street, Kansas City, Missouri.

Special Trends

In the wide variety of subjects taught to fire fighters during the past year there are a few which indicate significant trends of interest in the fire service . . . For example, *Alabama* and *Pennsylvania* developed special courses in the training of fire apparatus drivers. . . . "Human relations" was a subject which was incorporated into instruction for fire officers in a number of fire training programs but *Alabama* and *Idaho* in particular gave special attention to this subject. . . . The *Iowa* State Fire School also received a number of requests for the



Group of fire fighters who attended the 7th Annual Delaware State Fire School.

type of instruction which would aid fire fighters to be better prepared for Civil Service examinations. . . . In *Oklahoma*, W. Fred Heisler conducted a special course for chief officers in the development of a promotional system for fire departments. . . . Radiological monitoring was taught for the first time in the *Maryland* Fire School. In *Ontario* instructors and engineers of the Fire Marshal's Office lectured to Civil Defense sponsored courses throughout the Province while senior officials of the Office lectured on fire service subjects at various courses conducted in the Canadian Civil Defense Staff College at Arnprior, Ontario. . . . *British Columbia* and *Saskatchewan* utilize itinerant training for reaching the paid and volunteer fire departments and Civil Defense auxiliaries throughout those Provinces. In addition to basic fire fighting subjects, instructors from the Fire Marshals' Offices conducted classes on atomic, bacteriological and chemical warfare subjects. For fire department training the instructors travel throughout the Provinces with pumpers and other fire fighting equipment so that classes could be held in each fire department eligible for the training.

Saskatchewan's training program started in 1947 and now features a team of instructors who tour with a van-type truck equipped with a 420 (Imperial) gpm front mount pump, a 150 gpm booster pump and a full complement of fire fighting tools and equipment. In 25 elementary fire training schools and 3 advanced training schools the instructors taught 719 fire fighters. . . . British Columbia has 9 full time itinerant instructors who use two 500 gpm and an 840 gpm (both Imperial gallon measurement) pumpers. During the past year they trained 1,288 paid and volunteer fire fighters and CD auxiliaries. . . . *Ontario* conducts an annual 2-day administration and training conference for municipal fire chiefs and senior officers at the University of Toronto. This year the course was attended by 103 fire officers.

An interesting trend appears to be developing in the South. J. F. Cannon, of the Public Service Occupations Training in *Georgia's* Industrial Education Department writes that more fire apparatus has been purchased during the past year than during the previous five years, according to reports received by his office. He also states that the Georgia State Firemen's Association, Inc., has had great influence on the increase of firemen's training in that State. One of the first requirements in the Association's Retirement Bill which has been passed by Georgia's Legislature and House is that all firemen who wish to participate in the retirement program must receive a certain amount of monthly training. *Georgia* has 18 area coordinator-instructors who help to organize and train fire departments in smaller communities, and recent years have brought a rapid growth in the number of such fire departments. The area training program reached 3,096 fire fighters in 280 cities and towns.

Connecticut held a separate Fire Marshal's Institute at the University of Connecticut in Storrs with an attendance of 65. This will be an annual event for fire marshals and building officials. A 2-day Fire Chiefs' Conference was also held at the University with 90 officers from 60 towns enrolled for a course on Administration. . . . *Iowa's* Annual Fire School featured special training for fire brigade members from 40 industries in the State. Rescue training and demonstrations of TV tube implosions were part of the training program. . . . *Florida* featured a 3-day Fire Prevention Conference, itinerant instruction for 519 men in 27 communities, the annual Fire Service Improvement Conference, with 60 chiefs and instructors attending a 3-day session, and a 2-day meeting of a chiefs' committee on Fire Fighting Procedures.

The Colorado State Firemen's Association held a field meet with 36 fire departments competing in hose and ladder evolutions and 16 departments competed in a similar meet held by the Tri-County Firemen's Association. . . . Contra Costa Junior College in California conducted fog application tests patterned after the film "Using Water Wisely," with fire fighters wearing masks and extinguishing fires in a building with 1½- and 2½-in. lines equipped with fog nozzles. . . . *Arkansas* held full scale fire tests of different types of fog nozzles operating at various pressures while combatting flammable liquids and liquefied petroleum gas fires. . . . *Montana* included instruction on ventilation techniques and use of explosion meters as new training items.

More than 100 canisters were used in the short course for gas mask training conducted at the Maryland Fire College. Trainees wearing masks performed hose evolutions, climbed ladders, then descended before entering the "smoke" room.

Involved dwelling just before Wausau fire fighters began attack on the fire. Note ladder at side from which oil delivery man attempted rescue.

Fire fighters direct 2½-in. line into window as some of the furnishings are being removed from first floor. This unusual sequence of pictures was taken by Photographer M. J. Berg of Wausau.

TWO CHILDREN DIE IN RURAL DWELLING

TYPICAL of tragedy which can occur in rural dwelling fires is this incident which happened in Wausau, Wisconsin, on November 10. Two children died and one was rescued as fire quickly involved the upper story of the two-family wood frame dwelling. It was discovered as an oil service man came to the building to deliver fuel. The woman who owned the dwelling and the mother of the children each came to the yard when he arrived. The service man was the first to notice smoke issuing from the second floor. The mother ran into the house, rescued her 3½-year-old daughter and carried out the body of her 2½-year-old son. In the meantime the service man and the other woman obtained ladders and tried to enter the second floor through the window where a 16-month-old baby was in a room. When the glass was broken the fire gained rapid headway, and by the time the Wausau Fire Department was called, the building was heavily involved as shown above. Fire fighters arrived with two pumpers and had several lines in action when the well, which was the only source of water supply, became empty, and the dwelling became fully involved.

For rural fire departments, water supply is an extremely important problem. In several Connecticut counties, for example, when an alarm comes in for a rural fire, the mutual aid system of the volunteer fire companies automatically dispatches a number of tank trucks from various communities to provide the much-needed water. The NFPA Farm Committee for years has been recommending the inspection of such properties by fire departments serving rural districts. Such inspections are being conducted as part of extensive fire prevention programs in Ohio and several other Mid-Western States. (See FIREMEN for June, 1952.)

Fire in one room is blacked out but is spreading throughout upper floor of structure.

Fire fighter at left gestures helplessly to indicate that the water in the well, which was the only nearby source of supply, has been exhausted.

First Aid Demands Training!

An "open letter" by Dr. William Claudy

Here's another viewpoint on an important subject! Readers will recall that the September, 1955, issue of FIREMEN featured an article on "Practical First Aid," by Dr. Carl W. Irwin of Bangor, Maine.

Now Dr. William D. Claudy of the Board of Police and Fire Surgeons, Washington, D. C., brings us his opinions, which are contrary to Dr. Irwin's. Dr. Claudy has been a frequent contributor to FIREMEN and among his articles which have been reprinted are: "Methods of Artificial Respiration" (F19-3 — 50 cents), "Treatment of Burns" (F20-4 — 25 cents), "Carbon Monoxide in Fire Fighting" (F21-1 — 25 cents), and "Handling Common Contagious Diseases in an Emergency Ambulance" (F20-1 — 50 cents). All of these may be obtained from the NFPA Executive Office.

The editors are pleased to publish the comments of these distinguished members of the medical profession, since they both have worked with the fire service and are thoroughly acquainted with the problems confronting fire department personnel. We will also be pleased to hear opinions of other readers on the subject of how much first-aid treatment fire department members should be expected to render. Additional comments from Dr. Irwin will be published in a forthcoming issue.

Dear Warren:

This is an open letter to you and to the readers of FIREMEN. It concerns the article titled "Practical First Aid," by Dr. Carl W. Irwin, which appeared in the September, 1955, issue. I read this article with shocked concern and realized the dangerous disservice which it does to the cause of first aid.

For this reason I feel that it is my professional duty to take issue with Dr. Irwin's opinions, and it is my sincere hope that you will publish this letter, as well as any others on the subject which you may receive. Only by means of full and frank discussion will accurate, working hypotheses on such subjects be obtained.

In his introduction Dr. Irwin states that first aid is not treatment. On the contrary, first aid is treatment, the first that the accident victim receives. In many cases the adequacy of this treatment determines whether the patient will survive to receive more definitive "professional" treatment.

Next, he states that "all the first-aider can or should use can be learned in about two hours." Unfortunately for Dr. Irwin's premise, the lay first-aider is usually *first* in his contact with the seriously ill or injured patient. Good artificial respiration, either manual or mechanical, is universally conceded to be primarily the field of the lay rescue group. It cannot be taught in "two hours," nor can the larger field of general first-aid subjects.

Dr. Irwin states that instructors should not elaborate beyond demonstrating artificial respiration and bandaging. These techniques can only be mastered by *doing*, not observing, and constant practice is necessary for those who will apply them. Techniques must be mastered before the emergency occurs.

He emphasizes next that first-aiders should not get excited at the scene of an accident. How true! The best way that I know to prevent such excitement is by anticipating the difficulties which one may encounter. These cannot be learned in two or three hours, but require considerable study, followed by actual practice in applying remedial measures.

Dr. Irwin makes the general statement that "Clothing should not be removed unless there is good reason for doing so." This is obvious. What he neglected to add is that there is often good reason for doing so. Modesty should never be permitted to interfere with an adequate search for concealed injury, nor with the application of therapeutic measures.

When discussing the first-aid kit, he states that the well-equipped first-aid kit contains only two, or at the most three types of supplies, which he does not further identify; and then he proceeds in the next paragraph to describe the use of *four* such items in the treatment of a single injury.

He further states that "There are no useful drugs or chemicals for use by the first-aider, and none should be included in the (first-aid) kit." Does he then object to the use of the universal poison antidote? Does he feel that preliminary cleansing of the wound with such substances as hydrogen peroxide (in order to determine wound extent) is improper? Or does he believe that the use of antibiotic ointments such as bacitracin neomycin, which is noted for its low incidence of sensitization and toxicity, requires a medical degree? Should vaseline gauze from sterile foil envelopes never be applied to burns? Should the individual who feels faint not inhale the fumes of aromatic spirits of ammonia, or should the bee-sting victim deny himself the comfort of a soda paste?

The list is endless. Indeed, in his own previous article, "Occupational Hazards of the Fire Service," No. F20-3, which appeared in the June, July, and August 1953 issues of FIREMEN, he mentions the necessity for adequate first-aid equipment and states that "even the smallest department" cannot afford to be without the basic items.

In discussing injuries of the skin, Dr. Irwin states in "Practical First Aid "that the first-aider can do little to relieve pain and that the first-aider cannot use effective drugs. The use of analgesics by non-professional persons offers too controversial a field for discussion at this time, but the relief of skin pain is often possible without such drugs. For example, excluding air by means of dressings is the *most effective* way of relieving pain from recent burns.

When discussing the control of bleeding, Dr. Irwin condemns the use of pressure points and tourniquets. He advises direct pressure as the only method of hemostasis.

While it is true that direct pressure will suffice in most cases, vigorous bleeding from large arteries *cannot* usually be controlled by this method; and the use of pressure points or tourniquets may prove life-saving. The improper application of tourniquets is a subject which has aroused considerable controversy, but the errors can be corrected by training, and not of the "two or three hour" variety either.

CURRENT thinking in regard to the use of tourniquets indicates that the fear of gangrene has been overemphasized and that properly applied tourniquets can be left intact for several hours without danger of gangrene. (See Civil Defense Technical Bulletin TB-11-11 titled "Use of the Tourniquet in Controlling Hemorrhage", which details study and evaluation of the National Research Council on this important point.)

The use of traction splints is next condemned, in Dr. Irwin's article, and the first-aider is advised to apply no splints to the arms.

Traction splints, properly applied, correct over-riding, relieve pain and prevent further damage to deep structures, which might otherwise be aggravated regardless of the care used in transportation. I believe traction splints should be used for most fractures of the lower extremities. Dr. Irwin's description of leg splinting is, in my opinion, totally inadequate. Such first aid is more liable to aggravate, rather than prevent, further injury. As to the use of arm splints, I have seen many fractures where the limb has been preserved through the application of splints by carefully trained lay rescue squads; I cannot think of a single case of the many I have seen in my nearly fifteen years as a fire surgeon in which harm has been done.

The discussion of respiratory problems in "Practical First Aid," is incomplete as well as inaccurate. Problems of internal asphyxiation are not included in the statement that "breathing problems may be the result of trouble at any one of three places: the passages leading to the lungs, the lungs, or the breathing center of the brain." Carbon monoxide asphyxia is the result of loss of the oxygen-carrying power of the blood through the formation of carboxyhemoglobin, while cyanide poisoning interferes with the transfer of oxygen from red cell to tissue by inactivating cytochrome. Asphyxial problems also occur with crushing injuries of the chest, as well as with sucking wounds.

The statement that individuals whose lungs have been bruised, punctured, or irritated "should be kept lying on their sides," simply is not true. In any case of traumatic or spontaneous pneumothorax (*air or gas in the pleural cavity — Ed.*), whether accompanied by the presence of intrapleural fluid or not, a semi-sitting or sitting position is the position of choice. When treating victims of smoke or gas inhalation, a supine (*lying on back — Ed.*) position is best; if irritant fumes have been inhaled to the point of causing pulmonary edema, then the semi-sitting position is again the preferred one.

Open wounds of the chest, so called "sucking" wounds, represent a critical emergency where prompt and proper first aid action may be life saving. Such wounds should be promptly closed with bandages which are impervious to the passage of air.

As for Dr. Irwin's discussion of artificial respiration, it has been repeatedly demonstrated that the Schafer method is highly ineffective when compared to any of a number of push and pull manual methods. Every organization teaching first aid, including the Armed Forces of the United States, the American Red Cross, the American Telephone and Telegraph Company, the U. S. Bureau of Mines, and the National Research Council, now recommends the arm lift, back pressure (Holger-Nielsen) method. The use of approved mechanical resuscitators is not mentioned by Dr. Irwin, nor is the use of inhalators in conjunction with manual methods. Both of these devices have done a great deal to reduce the number of accidental asphyxial deaths in this country. A full discussion of these methods may be found in my pamphlet "Methods of Artificial Respiration" (NFPA F19-3).

When dealing with head injuries, or injuries to the back and neck, a victim should never be left lying on his side without proper support for his head. Agencies teaching first aid, including the Bureau of Mines and the American Red Cross, teach methods for moving victims who are suspected of having fractures of the neck or back. This is a subject about which many physicians know surprisingly little, and a study of first-aid methods would be a most advisable addition to many medical curricula.

It is my personal belief that well trained lay rescue squads can and do handle emergency asphyxial accidents better than the average general practitioner of medicine (who rarely encounters the problem), or municipal hospital ambulance crews (usually manned by recent medical graduates who have never treated such life threatening emergencies). These subjects have been lamentably neglected by many medical schools in the past; and consequently professional knowledge in this field leaves much to be desired.

Only anesthetists as a group are truly qualified by experience and training to meet these asphyxial problems; and until such knowledge becomes more widely disseminated, rescue squads will, I trust, continue to save lives as they have in the past.

The casual treatment accorded accident victims in many hospital waiting rooms has often discouraged the well trained first-aider who sees basic precepts of treatment violated, either by callousness or lack of knowledge on the part of medical students, interns, and nurses who all too often assume a godlike attitude in their unwarranted assumption of superiority in this field.

The foregoing opinions are my own and do not necessarily represent the opinions of the Board of Police and Fire Surgeons of the District of Columbia, nor of any other fire or rescue organization with which I am associated.

I do believe that the views asserted by Dr. Irwin in his article should be refuted. Only through free criticism and discussion can such problems be clarified, and I look to FIREMEN to take the lead in this matter.

Very sincerely yours,
William D. Claudy, M.D.

Philadelphia fire fighters prepare for attack as fire bursts through windows on second floor. (*Wide World Photo*)

"Death of a Quiet Man"

AS THIS is being written the official report is not yet available concerning the fire in Philadelphia, on October 27, which resulted in the death of one fire fighter and injury to 13 others. The building was a 4-story brick structure and the fire apparently involved lacquers, solvents and other products in a lamp manufacturing concern. Shortly after fire fighters laddered the building (*above*), an explosion blasted the third story wall outwards and Fire Fighter Arthur Mumbauer lost his life in the falling rubble.

One result of this tragedy was the editorial which subsequently appeared in the Philadelphia *Evening Bulletin*. Reprinted below, it is a forceful description of the significance of a fire fighter's death in action. It is also a worthy tribute to everyone in the fire fighting service and merits public attention throughout the nation.

A man takes a job and settles down to do it the way it ought to be done.

The years go by, and it gets to be the major part of his life. He doesn't want it any other way. He builds a reputation for complete reliability, for hard work, for "doing everything just right," in the words of his boss.

Fellow-workers get to know him as a quiet man with a big smile even when being ribbed, as a good hand at pinochle when things get dull. Year after year his service record shows 30 days of sick leave allotted; none taken. The chance comes for retirement after 20 years, but he has no desire to leave. The job, and an occasional bit of hunting and fishing, keep him happy.

Such a man was Arthur Mumbauer, a City fireman for nearly 30 years. As things stood this Thursday, he was talking of retiring in February. And he was thinking with pleasure of the weekend when he and his son would be trudging the fields near Lebanon on a little gunning expedition.

Then the alarm sounded for Engine 17 and Arthur Mumbauer went to work at one more fire. There seemed to be nothing extraordinary about it. One moment it was being contained efficiently. The next a wall was falling. With the collapse Arthur Mumbauer became another in the long list of firemen whose service cards end with the notation: Killed in Line of Duty.

Lieut. Bob Kennedy of the Philadelphia Fire Department took this picture just after the wall fell outwards. Running man is Fire Fighter David Blackman.

The difference between the career of Fireman Mumbauer and a thousand other quiet, hard-working men is underscored by that falling wall. Every fireman knows that a routine fire virtually doesn't exist.

For $4,500 a year he accepts the chance of death or disablement every time the alarm goes off. When disaster hits, as it did in the Berg Laboratories explosion last year in which ten died, or in Thursday's blast that sent 13 to the hospital, even more-protected citizens are appalled. With the firemen it's personal. The emotion comes into their voices when they talk of it.

But they don't quit. It's their job, and they do it to the best of their ability, ignoring the danger. The way, until last Thursday, Arthur Mumbauer did it.

Better-manicured men draw up codes of professional ethics. Firemen simply live theirs.

Tax Pointers for the Fireman

by Joseph Arkin
Certified Public Accountant

Here's a subject of personal concern to every fire fighter who receives a salary from his municipality for his work as a member of the fire department. Mr. Arkin itemizes a number of expenses which may be deducted from gross income when the Federal tax return is filed. Members of paid fire departments might benefit by keeping an accurate accounting of such "deductible" expenses throughout 1956, so that all legal deductions for the year may be totalled quickly and easily.

A GLANCE at the calendar will tell you that the time is again at hand when Mr. and Mrs. Taxpayer start their annual struggle with that "menace" — Form 1040, the Federal tax return.

Certain deductions are available to all classes of taxpayers including, (but not limited to) taxes, interest, charity, medical, casualty losses, and others. However, this article will detail additional specific items which can be deducted in a fireman's Federal tax return.

Since they are salaried, practically all firemen in "paid" fire departments will report gross salary and other taxable income on page one of the Federal return. If the income total is under $5,000 a fireman may use either of the two methods of computing tax. The tax table in the instruction booklet can be used, or if specific deductions exceed 10 percent then it will be to the fireman's advantage to itemize deductions in the spaces provided. For earnings over $5,000 the taxpayer can elect to take 10 percent of the adjusted gross income (with a limit of $1,000), or list itemized deductions if their total exceeds the 10 percent figure.

Here's a brief explanation of specific items which may be deducted by firemen on a Federal tax return to effect substantial tax savings.

ASSESSMENTS which you have paid to an "unemployment fund" of a union or association which provide for benefits to members for unemployment. Sickness, accident or death benefits are not included in this category.

AUTOMOBILE EXPENSES which are paid out of your own funds if essential to holding your job. These expenses will include depreciation, parking, washing, repairs, accessories, registration fees, gasoline, oil, cost of winterizing or summerizing, garage rent, interest paid on financing purchase, insurance, etc. Where the automobile is used both for your position as a fireman and for pleasure, the costs must be prorated. Expenses to report to work and to go home are not ordinarily deductible — actual use of the car and its need for your job will determine deductibility of these expenses. Automobile expenses are deductible from gross income on page one of the return. The personal portion of taxes, interest and registration fees can be deducted on page two of the return.

INITIATION FEE to join a labor union or fire fighting organization in addition to all sums charged you as dues.

FEE paid to an employment agency in order to secure the position, but not the expenses in securing employment (such as transportation fares, postage, etc.)

UNUSUAL EXPENSES incurred by you which are necessary to hold your position. These might include certain education costs under specified conditions. Various decisions have been rendered by the Tax Court on the subject of deducting the costs of special courses where they were "ordered" by superiors or made mandatory before promotion. There is no set rule for this deduction. Each case would stand or fall on its own merits.

UNIFORMS and accessory costs, which you pay as a fireman, are deductible. This issue has been settled by several favorable court decisions.

LAUNDRY AND REPAIR BILLS for uniforms and accessories comprise an element of a fireman's expenses.

SUBSCRIPTION costs to professional fire-fighting magazines; cost of fire-fighting manuals; books on fires, arson, etc., deductible if useful life is short, otherwise they are subject to rules of depreciation. (This would include NFPA publications. NFPA dues and contributions to NFPA are also tax deductible — Ed.)

The deductions enumerated above are specially for firemen in paid municipal fire departments. Volunteer firemen may apply similar deductions. In addition, firemen in industrial fire brigades can deduct state unemployment insurance taxes. However, unless the industrial fireman can show the need for automobile expenses and need for uniforms to the satisfaction of the Treasury Department, these expenses will not be allowed as deductions.

Expenses which are deducted are always subject to audit and review by the Treasury Department-Bureau of Internal Revenue. Therefore, it should be kept in mind that detailed records of expenditures should be maintained. A desk diary is an excellent media for such record keeping and the data will enable you to take advantage of tax savings.

When preparing your return for this year it will be well to remember the Revenue Act of 1954 with its complete overhaul and numerous changes of existing regulations. So complex is the tax structure today that it pays, when in doubt, to use the services of a tax-attorney or certified public accountant.

Another Good

HOME INSPECTION PROGRAM

Headed by Chief Patrick J. Quane, the fire department of Richland, Washington, is conducting a campaign of dwelling inspection by fire fighters. The letter shown on this page, written to Jay W. Stevens, executive secretary of the International Association of Fire Chiefs, includes some interesting descriptions of how Chief Quane's Richland Fire Department proceeded on its inspection program. It is interesting to note that the department made use of a public relations specialist from an industrial concern.

Dear Jay:

We are in the midst of the most extensive home inspection program ever conducted in Richland, Washington. Since you have been instrumental in promoting home inspections on a national scale, we would like to take this opportunity to brief you on our city and on our campaign.

The Community Section of the General Electric Company, prime contractor for the U. S. Atomic Energy Commission, is responsible for the operation of the City, whose population is 27,500. The departmental components that make up the Community Section are similar to the departments used in normal city operation.

Realizing that the success of such a campaign depends largely upon wide publicity and well-trained inspectors, we planned our program thoroughly prior to start of inspections.

Our advance publicity included a series of photos taken of "posed" hazards in various residences throughout the city. These photos, appropriately captioned, were released daily in local newspapers, along with other news stories describing the inspection campaign. The newspaper articles and radio announcements informed our residents of the principal hazards we would check for, and encouraged them to eliminate these hazards before inspections were begun. In addition, we obtained excellent coverage in a local industrial plant newspaper having a very wide distribution among our citizens. This type of publicity resulted in reducing the fear some people have regarding fire inspections of their homes, as can be attested by the fact that only three refusals were encountered during the first 5,000 inspections.

We continued our publicity as the campaign progressed with frequent newspaper releases and radio interviews. Publicity is the nucleus of any successful fire prevention program and the most important weapon any fire department uses in creating a safety-minded citizenry.

Realizing that the success of the campaign depended upon the firemen and officers having "know-how" and confidence to cope with all problems, and the ability to be fire prevention salesmen, we inaugurated an extensive training program.

In view of the importance of good public relations in fire prevention work, we obtained the services of a public relations specialist from the local General Electric Company to conduct a course in "customer relations" for all firemen and officers. With assistance of the Fire Marshal, the course was tailored to fit the inspector's work. His experience enabled him to prepare a script on the average conversation during a typical fire inspection. This script was used, in playlet form, with firemen playing various roles during the training course. It created considerable interest and tended to cause firemen to absorb more of the "customer relations."

Upon completion of this eight-hour course for each shift and station, the Fire Marshal's staff conducted a course in fire prevention for all firemen and officers. This training included detection of hazards commonly encountered in homes, methods of corrections, and plans for evacuation in event of fire.

The staggering amount of fire casualties resulting from residential fires prompted us to take action to educate our citizens in the defense of life safety against fire. Consequently, informal discussions on suggested home fire drills and evacuation plans were made with each resident during the city-wide campaign. We feel that the direct appeal of our uniformed firemen did more to encourage participation than any other means of promotion. Our observation revealed that the average citizen's lack of knowledge contributes to the fear and panic which usually results in casualties during emergencies. The discussions and previous publicity on the subject created considerable interest among residents, many of whom discussed their plans and asked the firemen's opinion. Knotted ropes, extra basement escapes, etc., are being noted as inspections progress.

The inspections are being made by full fire companies operating from apparatus equipped with three-way radios. Follow-up inspections on homes are also made by the fire companies. Since our goal is 7,000 inspections (every residence in Richland) we detail a fireman, operating from a fire department vehicle, to evening and weekend inspections to complete the follow-ups.

At the time of this report, we have conducted 5,350 inspections. An average of .55 hazards in each residence was encountered during these inspections. We feel that the low percentage of hazards is largely a result of the type of publicity centered on gaining the cooperation of our citizens.

To sum up, we feel that our residential fires will be greatly reduced; our citizens will be more safety conscious, and our firemen and officers are broadening their knowledge.

Should you desire further information when our campaign is completed, please let us know.

Sincerely yours,

PAT J. QUANE, FIRE CHIEF
RICHLAND, WASHINGTON

Fires and Fire Loss Classified, 1954

THE report "Fires and Fire Loss Classified, 1954" which appeared in the October, 1955, NFPA *Quarterly*, has now been reprinted as a 12-page, 6 by 9-in. pamphlet. Priced at only 25 cents per copy, with generous discounts granted for quantity purchases, the pamphlet presents a thorough study of the number of fires and their causes, together with a breakdown of fire loss distribution by occupancies.

The report shows that there were approximately 1,993,000 fires of all types in the United States during 1954, and they caused loss estimated at $1,017,000,000. This represented a decrease of approximately 5 million dollars of fire loss from the previous year. The number of building fires increased by 6.1 percent while the loss was 1.5 percent less than the previous year.

Copies of "Fires and Fire Losses Classified, 1954" may be obtained by writing to the NFPA Publications Department, 60 Batterymarch Street, Boston 10, Massachusetts. Ask for reprint Q49-3 and a free list of NFPA publications.

Two-way Radio in Roslyn, New York

Rescue Hook and Ladder Company No. 1, Roslyn, New York, recently equipped its apparatus with DuMont two-way radio. The fire company, headed by Chief Anthony R. Langone, has a distinguished record which dates back more than 100 years. It was organized November 1, 1852, and rented its first fire station for $2 per month. Members of the company above include (*left to right*): Edward J. Kelly, Jr. (in chief's car), 1st Assistant Chief Edwin J. Morel, Chief Langone, Elmer Peterson (in aerial truck), 2nd Assistant Chief Harry Shellock, and Thomas R. Breen (in pumper at right). Also shown is Walter J. Roche, Eastern Sales Supervisor, DuMont Mobile Communications.

Chief's Car in Lewiston, Maine

Chief Zepherin F. Drouin, of the Lewiston, Maine, Fire Department, recently acquired this 1955 Pontiac 4-door station wagon as a chief's car. It is equipped with two-way radio and may be used as an auxiliary ambulance. Rear seat folds into floor to provide 6 feet of additional space for equipment or stretchers.

Own Your Home in
FLORIDA

for $350 down

Total price $4,950 includes house and lot

Pompano Beach Highlands
on the famed Florida east coast!

If you are retired or near retirement *you can own your home* in Florida on a monthly income of **$160**

$4,950	1 BEDROOM, BATH $350 down $33 monthly
$5,490	1 BDRM., BATH, SCREENED PORCH $390 down $36 monthly
$6,450	2 BDRMS., BATH, SCREENED PORCH $450 down $42 monthly
$6,880	3 BEDROOMS, BATH $480 down $44.50 monthly

Monthly payments quoted include principal, interest, taxes, insurance.

On U.S. 1 halfway between Miami and Palm Beach, with Ft. Lauderdale minutes away, Pompano Beach Highlands offers a richer, fuller life at *much less cost.* Churches, shopping, schools, broad public beaches and recreational facilities . . . Our own water and sewage disposal plants . . . No municipal taxes . . . No assessments . . . Minimum lots 75'x100'. It's Florida's biggest retirement home value! Finest quality masonry construction . . . expert workmanship throughout. Find out today how easy it is to own your home in Florida.

You can purchase for vacation or investment under conventional financing if you are not retired.

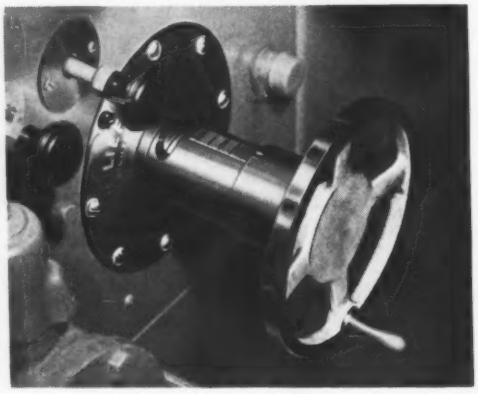
MAIL COUPON TODAY!

THE MACKLE COMPANY, INC.
Pompano Beach Highlands, Dept. F-12
2818 Coral Way, Miami 34, Florida
Please rush me free detailed information on Pompano Beach Highlands.
Name .....
Address .....
City..... Zone... State...

HANDY HALE RELIEF VALVE CONTROL

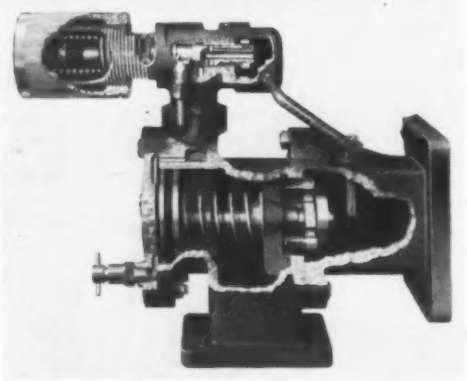
NOW AVAILABLE FOR

All Hale 1, 2 and 3- Stage Centrifugal Pumps



This new Hale Relief Valve Control with handy "Setting" Wheel shown at left is now available for all Hale single, two and three-stage Centrifugal Pumps that use a Hale Relief Valve, *regardless of age.* The Wheel Control is now standard on *all present* Hale centrifugal fire engine pumps, and can be easily mounted on all older single, two and three-stage Hale centrifugals in service. It can be mounted directly over the Relief Valve, or Panel-mounted as pictured at left, to replace the older style knurled Control shown under the arrow below. The new Control made an instant hit with all who saw and handled it at the International Fire Chiefs Convention at Omaha. This advertisement is in response to the many fire fighters who asked whether it could be used to replace the older style Control. Price of a replacement kit, including instructions on how to make the change, will be gladly furnished on request.

NOTE:
Dotted line points to older type knurled Control knob on Relief Valve Control which the modern "QL" control and Setting Wheel replace.



Cost of change-over kit is reasonable and change-over can be easily made.

To HALE FIRE PUMP CO. — Please send us the information on how to change over our present Relief Valve Control to the modern "QL" Control.

Name ..... **Fire Co.** .....

City ..... **State** .....

Our Pump is a Hale Type ..... **Serial No.** .....

HALE FIRE PUMP CO. CONSHOHOCKEN, PENNSYLVANIA

Fire Service Training Publications

SOME useful fire service training publications are now being distributed by The Instructional Materials Laboratory of the Ohio Trade and Industrial Education Service, Division of Vocational Education, Ohio State Department of Education.

The first of these, titled "Fire Service Training Manual," consists of more than 250 pages, including some 400 illustrations showing proper fire-fighting tactics, procedures, and evolutions. It is designed to be used as a basic test for the state-wide, 30-hour training course given by the Ohio Trade and Industrial Training Service. In addition to outlining basic fundamentals of fire fighting practice and use of equipment, the manual also defines legal aspects of fire protection in Ohio, community fire defense, care of apparatus, and other operational procedures for fire fighters. It is available at $1.88 per paper-bound copy, or $2.90 per cloth-bound copy. Postage and handling charges of 25c per single copy should be added to the above prices.

The second publication is titled "Learner's Workbook." This is a series of assignment sheets which breaks the Fire Service Training Manual into a number of simple lessons. It is intended to be an aid for promotional examinations as well as a form of instruction for fire fighters. The paper-bound "Learner's Workbook" is available at 63c per copy plus postage and handling charges.

Also distributed by The Instructional Materials Laboratory is a special "Instructor's Manual" consisting of twenty-three detailed lesson plans. This was especially prepared as a guide for group instruction methods which may be used in teaching fire service training. Each lesson plan is broken down to: desired results, materials, equipment, supplies needed, references, and four methods of presenting a special lesson. It is priced at $3.50 plus postage.

All of the above publications may be obtained by writing to: The Instructional Materials Laboratory, 200 Communications Laboratory, Ohio State University, Columbus 10, Ohio.

FIGHT FOREST FIRES more effectively with Rockwood WET, a wetting liquid specially prepared for fighting this type of fire. Available in 50 gallon drums, 5 gallon and 1 gallon cans, Rockwood WET is shown here with the Rockwood Eductor which *automatically* introduces WET into the hose line.

Makes water go a long way to extinguish forest fires

Rockwood WET increases water's depth of penetration and extinguishing power — even at fire temperatures!

With Rockwood WET, less water, time and manpower is needed to put out fire, to penetrate and extinguish deep-seated fires so that rekindling is greatly reduced. Tested and listed by Underwriters' Laboratories, Inc., Rockwood WET has proven its effectiveness in fighting deep-seated fires of wood, sawdust, cloth, rubber, leaves, etc.

Rockwood WET in proportion of 1% for Class A fires and 2% for Class B fires is extremely effective. The Rockwood Eductor with metering check valve is specially designed for this purpose. It *automatically* proportions liquids at any fixed percentage from 1% through 6%.

Get all the facts.

For complete details write for Rockwood's free illustrated catalog. Distributors in all principal cities.

ROCKWOOD SPRINKLER COMPANY

Engineers Water . . . to Cut Fire Losses

ROCKWOOD SPRINKLER COMPANY
Portable Fire Protection Division
1007 Harlow Street
Worcester 5, Mass.

Please send me your illustrated booklet on Rockwood WET and Eductor.

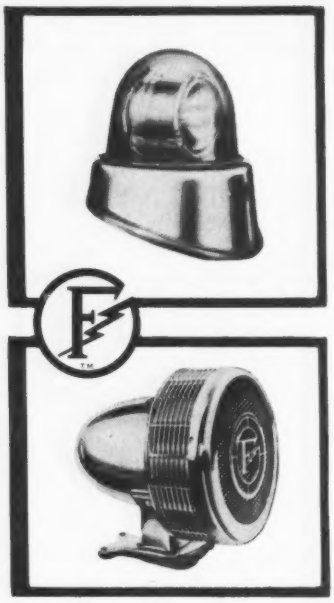
Name.....

Title.....

Company.....

Street.....

City.....*Zone*....*State*.....



PLAY SAFE . .

The display of fire apparatus at the recent IAFC Convention featured a predominant display of FEDERAL Coaster Sirens and Beacon Ray lights.

FEDERAL signals were chosen by the majority because highest quality and maximum protection were uppermost in the minds of these experienced buyers.

The primary purpose of any fire department is to render a public service; **better fire apparatus** is a means of achieving that end. **Better signals,** protecting men and equipment responding to an alarm, contribute to the efficiency of modern equipment and improve the record of the department.

You can obtain additional value from your equipment and an additional measure of protection for it by specifying FEDERAL model Q sirens and Beacon Ray lights on all **new** apparatus. Accept no imitations!

FEDERAL SIGN and SIGNAL Corporation

8717 South State St., Chicago 19, Ill.

POWHATAN

Wishes You A

Merry Fire Safe Christmas and Prosperous New Year

IN BUSINESS SAME LOCATION SINCE 1892

POWHATAN BRASS and IRON WORKS

RANSON, WEST VIRGINIA

Phones 93 & 94 Charles Town, West Virginia

Established 1892

Tillerman of Truck 16 in the Baltimore Fire Department demonstrates how safety belt is attached around waist when apparatus "rolls".

Belts for drivers and officers who ride in the cabs are fastened across thighs, similar to aircraft safety belts. This is the cab of Truck 16.

Baltimore's Safety Belts

THE fire department in the City of Baltimore, Maryland, is now using safety belts on all "first line" apparatus. The belts were installed on the recommendation of Chief Michael H. Lotz, who heads the Department.

Baltimore's Deputy Chief Frank J. Trenner reports that Chief Lotz suggested the use of belts after several accidents had occurred in which drivers or fire officers were thrown into the street. A few belts were obtained from a local salvage company and were submitted to the Fire Department Physician for approval. After thorough inspection the safety belts were tried as an experiment on several pieces of apparatus. The results were satisfactory and all pieces of first line

apparatus were so equipped. Department orders now make it mandatory that the belts be used whenever apparatus leaves quarters.

Concerning such safety belts, the Ansul Chemical Company of Marinette, Wisconsin, recently released an interesting news item. (For the past several years the company's representatives have had safety belts installed in their cars.) Last year that company's automobiles were driven about 1.5 million miles by representatives. Only seven serious accidents resulted and from these accidents all but one man escaped with minor abrasions or were uninjured. The seventh man, who was not wearing his belt, was hurled partly out of his car and dragged along the highway. He died in a hospital several hours later. Ansul's summary of the accidents shows that the representatives who were wearing the belts survived a head-on collision, an "out-of-control" collision, "side-swiping" and rolling over, skidding into a large ditch and boulder, skidding on an icy curve, and an out-of-control crash into a guard rail. The man who died was also involved in a head-on collision.

Renewing Membership?

BETWEEN January and April of each year a large proportion of NFPA member fire departments renew membership in the Association. If your department is scheduled to renew in these months, why not be certain that all of your fire fighters are receiving full benefits from NFPA membership? FIREMEN magazine, for example, is available only to NFPA Associate members or to member fire departments. However, through that membership, a fire department may obtain any amount of yearly subscriptions to the magazine for only $1.25 per subscription, providing the subscriptions are requested at time of membership renewal. Are all of your fire fighters receiving FIREMEN?

If not, notify all of your department's members that you are going to renew membership in NFPA on a certain date. Write a list of the men who want to receive FIREMEN for only $1.25 per year, and submit that list with your renewal order to the NFPA Executive Office. Be sure to include the correct home or fire station mailing addresses.

MIDWESTERN
Safety Clothing for FIREMEN
The Original STRIPED SAFETY COAT

The striped safety coat for firemen is an *original* MIDWESTERN development . . . featuring highly visible yellow stripes which are *rubberized as part of the material* . . . not painted, glued or sewed on!

Service records prove that Midwestern Striped Safety Coats withstand years of rugged duty . . . offer high safety visibility during the entire life of the garment. There are many imitations but *no substitute* for the workmanship, built-in comfort and longer wear you receive by specifying MIDWESTERN.

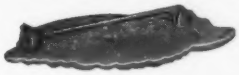
MIDWESTERN LEADS IN QUALITY

Superior quality, advanced design, exclusive fabric materials and safety features have made Midwestern a leader in the field of firemen's safety clothing. For complete information on our full line, see your Midwestern dealer. A letter to the factory will also bring you literature and material samples for your inspection.

MIDWESTERN SAFETY MFG. CO. Mackinaw, Illinois
Manufacturers of the Famous MACKINAW Safety Coats

N-R-N-R-N-R-N-R-N-R

NIELSEN-RIONDA
Present their Exclusive
FLAT BACK BADGES



Unmatched Beauty
Greater Durability

Among their features — Coat and Cap attachments, center emblems and numbers are GUARANTEED for a period of 10 years of normal wear against separating from Badge body.

Send for our new 32 page catalog at no charge that illustrates the complete Nielsen-Rionda line of fire badges.

Dealer inquiries invited. Write to Department FI

NIELSEN • RIONDA INC.
40 JOHN ST., NEW YORK 38, N. Y.

IDENTIFICATION SIGNS

for personnel in
PUBLIC, INDUSTRIAL and
AUXILIARY FIRE DEPARTMENTS

Standard made as per cut, CHIEF, ASSISTANT CHIEF, CAPTAIN, LIEUTENANT, PRESIDENT, CHAPLAIN, INSPECTOR, MEMBER, VOLUNTEER, DRIVER, ENGINEER, SECRETARY, TREASURER, POLICE and AUXILIARY MEMBER.

* * * *

Made of white base plastic for outdoor use, finished in fire engine RED. Available (on order) in RED, YELLOW and BLACK base plastic, white finish or corresponding colors. **PRICED 63c single, in pairs $1.25.**

* * * *

Made SPECIAL, as you desire, your department name, Town, Township, Association, etc. **MINIMUM ORDER 50 PLATES @ 88c each.** *Available through your fire equipment dealer or order direct.*

BEST WISHES FOR A MERRY CHRISTMAS AND A HAPPY NEW YEAR!

E. B. LANE, Distributor
32 GREENWOOD AVE.
TOLEDO 5, OHIO, U. S. A.

In Canada:
C. E. HICKEY & SONS, LTD.
HAMILTON, ONTARIO

Vulcan and his cohorts, active in the famous St. Paul Winter Carnival are the arch enemies of Boreas Rex, King of the North Wind. Vulcan, who rides a fire truck, symbolizes warm weather. His mark is a sooty kiss planted on the cheek of every pretty girl.

Passing the test. WATEROUS-equipped truck built for City of St. Paul by Howe Fire Apparatus Co.

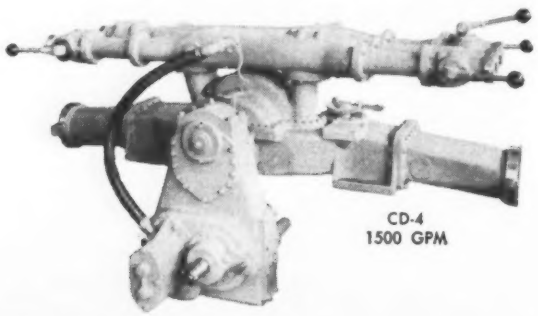
St. Paul Selects Waterous

In St. Paul, Minnesota as in many other cities, construction of new homes, factories and commercial buildings is at an all-time high. Keeping pace with this growth is the progressive St. Paul Fire Department, now numbering over 400 well-trained men under the able leadership of Chief Wm. H. Mattocks. Since 1949, the Department has not only increased its manpower, but has added 20 pieces of modern equipment, the most recent being a WATEROUS equipped 1500 GPM pumper. During the acceptance test, this pumper passed the Underwriters' "Class A" test, and a 1600 GPM spurt test, with a single line of 6" hose at a lift of 8 feet.

One of the dependable WATEROUS Class A centrifugals, the Model CD-4 pump gives Minnesota's capitol city of 334,000 inhabitants its largest capacity pumper. But, big capacity is not all . . . the CD-4, like other WATEROUS pumps, is famous for easy operation and maintenance. Its special features, which meet today's more exacting specifications, include the horizontal split casing, outboard oil lubricated bearings, water lubricated split gland stuffing boxes, easily replaced bronze wear rings, and highest quality accessories.

There are many other features which add to WATEROUS pump dependability and performance . . . many other reasons why WATEROUS pumps are selected by so many fire departments throughout the nation.

Write for full information on the complete line of WATEROUS centrifugal Fire Pumps, ranging from 100 to 2000 GPM; also ask for your free copy of "Preferred Fire Pump Specifications," specially written to help you with your pump selection. WATEROUS Company, 42 E. Fillmore Ave., St. Paul 1, Minn.



CD-4
1500 GPM

Waterous
DEPENDABLE PUMPS
SINCE 1886

IAFC Officers

OFFICERS elected during the recent convention of the International Association of Fire Chiefs include Chief William Fitzgerald, Seattle, Washington, as President; Chief Wayne Swanson, Rockford, Illinois, as First Vice President; Chief Donald S. Charles, Charlotte, North Carolina, as Second Vice President; Ex-Chief Daniel B. Tierney, Arlington, Massachusetts, as Treasurer; Jay W. Stevens, San Francisco, California, as Executive Secretary; and B. Richter Townsend, as Secretary-Manager. The 1956 convention of the IAFC will be in Miami, Florida, November 12 to 16.

Charles Fales Appointed

CHARLES M. Fales of Haverstraw, New York, has been appointed by Michael H. Prendergast, Director of the Division of Safety of Fire Mobilization and Control. He succeeds B. Richter Townsend, now Secretary-Manager of the International Association of Fire Chiefs.

Chief Fales has been actively engaged in the fire service for 34 years. He joined the Haverstraw Fire Department in 1921 and moved up through the ranks to the position of Chief. He has been president of the Rockland County Volunteer Firemen's Association and has been active as an officer in the Hudson Valley Firemen's Association and the Firemen's Association of the State of New York, in addition to many other fire service organizations. He also has been editor of the "Hudson Valley Firemen."

"Inquiring Reporter"

THE Cedar Rapids, Iowa, fire department recently received some favorable newspaper publicity for its home inspection program. A feature column in the Cedar Rapids *Gazette* is devoted to opinions of the townspeople. On October 12th this column reported interviews with a number of the citizens, all of whom rendered highly favorable comments on the fire department's home inspection program.

Since many newspapers feature this "inquiring reporter" type of feature article, it might be worthwhile for other fire departments to encourage editors to call attention in this manner to the importance of the home inspection program.

Contest Judges

JUDGES for the Fire Prevention Week Contest will be: NFPA President, T. Seddon Duke, Star Sprinkler Corporation, Philadelphia, Pennsylvania; C. M. Gallagher, United States Manager, Atlas Assurance Company (representing NBFU, New York City); A. Leslie Ham, Manager, Dominion Board of Insurance Underwriters, Montreal, Canada; Newell R. Johnson, General Manager, American Mutual Alliance, Chicago, Illinois; and Chief John V. Stapleton of the Boston, Massachusetts, Fire Department, who will be representing the International Association of Fire Chiefs.

The contest closed November 30, and indications are that the total number of entries will exceed the amounts of previous years. Winners of the seven classes of the contest (United States cities, Canadian cities, industry, Army, Navy, Air Force, Canadian military) will be announced in FIREMEN magazine.

Booklet on Nozzles

THE Fire Protection Department of Oklahoma A & M College has issued another of its Fire Service Training publications. Titled "Manufacture, Selection, Care and Testing of Nozzles," this is a 96-page paper bound, 5½ by 8½-in. illustrated booklet, priced at $1.75 per copy.

It provides a useful study of straight stream and fog nozzles used by the fire service, and includes explanation of factors which influence the pattern and projection of streams. Particular emphasis is given to fog nozzles, with descriptions of nozzle design and pressures, velocities of the fog streams, size of water particles, and volume of water discharged. Reference is made to the reports compiled by the NFPA subcommittee which conducted studies of fog nozzles at Elmira, New York, and at the University of Maryland. (See FIREMEN for October, 1955.)

The booklet also discusses engineering design and construction details of nozzles, nozzle control valves, and types of nozzles available to the fire service when the report was prepared. Copies may be purchased by writing to The Fire Protection Department, Campus Fire Station, A & M College, Stillwater, Oklahoma.

IDEAS, as some people seem to think, do not come to us like a "Bolt From the Blue." BLACKINTON badge designers know from experience that ideas are the product of long hard work — work that requires the knowledge and experience of years in the badge field. Why not give your department the added prestige of a custom design.

The first step in the development of Honolulu's outstanding Police Badge.

There is absolutely no obligation for this extra BLACKINTON service.

ASK YOUR EQUIPMENT SUPPLIER TO SHOW YOU ACTUAL SAMPLES OF BLACKINTON BADGES.

BLACKINTON

V. H. BLACKINTON & CO., INC., ATTLEBORO FALLS, MASS.

BADGES AND UNIFORM INSIGNIA FOR EVERY SERVICE AND INDUSTRY

'Choice for Quality the World Over'

INDIAN FIRE PUMPS are

Be sure to have a stock of **INDIANS** in your department. Fire Chiefs call them "a one man Fire Department" and say "they are worth their weight in gold."

Approved by UNDERWRITERS' LABORATORIES

The INDIAN is available in the lever type, known as our No. 80 INDIAN.

CATALOG ON REQUEST!

The No. 147 adjustable Nozzle will throw any type of spray or fog mist and also will hurl a powerful straight stream of over 30 ft.

For all class "A" fires: and many small class "B" fires can be extinguished with **INDIAN FIRE PUMPS.**

"Please ship six No. 90G Indian Fire Pumps at once. We have 12 Indians in use at the present time and we could not get along without them in our fire department. You cannot beat the Indian Fire Pump for putting out fires."
John H. Mullaly, Jr., *Fire Chief* Millville, Mass.

D. B. SMITH & CO. 408 MAIN ST. UTICA 2, N. Y.

PACIFIC COAST BRANCHES

Hercules Equipment & Rubber Company, Inc. San Francisco 7, Calif.
Fred E. Barnett Co. Portland, Oregon
Mill & Mine Supply, Inc. Seattle 4, Washington
Holprin Supply Co. Los Angeles 15, Calif.
Fred E. Barnett Co. Klamath Falls, Oregon
L. M. Curtis & Sons Salt Lake City, Utah

CANADIAN AGENTS

Fleck Bros. Limited Vancouver, B.C., Canada
C. E. Hickey & Sons, Ltd. Hamilton, Canada

Classroom Lesson

The October issue of the *Fire Eater*, the publication of the South Dakota State Fire Marshal's Office, mentions an interesting item concerning fire prevention education of school children. The State Fire Marshal's Office totalled the monetary fire losses for the state over a 1-year period. When representatives of the Fire Marshal visited schools they asked the students to try to "spend" the money lost through fires for one year. The average yearly fire loss estimated for the State was a little over two million dollars. As the children called out items which they would like to have, such as homes, cottages, automobiles, airplanes, clothes and travel, the estimated cost was totalled on a blackboard. According to the *Fire Eater* seldom did the children "spend" more than one million dollars before they ran out of ideas.

Sounds like another effective way of calling attention to the sheer waste of our nation's fire losses.

Christmas Items

THIS year's NFPA posters and folders for the Christmas season are now available. The poster is an 8½- by 11-inch sheet which features Sparky, a little girl, and Santa Claus, together with the slogan ". . . and a 'Fire Safe' Christmas, too . . . please, Santa." Copies may be obtained at the following prices: 12 copies for $1.00; 100 for $5.00; 1,000 for $35.00; and successive discounts for larger quantities. Ask for poster JH27F.

The Christmas folder features the familiar slogan "Watch Out For Fire, too, at Christmas Time." It is a colorful sheet which will be especially useful for fire departments to distribute in their communities just before the Christmas Season. It contains simple, easily understood suggestions for fire-safe preparation of Christmas trees, lighting fixtures, decorations, wrappings, and gifts. Space is provided on the back cover for imprinting your fire department's name.

Copies may be obtained from the NFPA at $2.50 per 100 and $20.00 per 1,000. When ordering, ask for G-24B.

A member of Portland's Junior Chamber of Commerce presents a plaque to Chief Grenfell, who also received an outboard motor and other gifts as the City of Portland celebrated "Chief Grenfell Day" to open Fire Prevention Week. Jay W. Stevens (right) was the featured speaker during the luncheon which was part of the tribute to the Chief's many years of outstanding service to his community. (*Photo by "Dick" Slater, Portland Bureau of Fire.*)

Chief Grenfell Honored

CHIEF Edward Grenfell of the Portland, Oregon, Fire Department recently received awards from Chamber of Commerce organizations for outstanding service. Presentation was made during Fire Prevention Week when a public luncheon was held in his honor.

Chief Grenfell is in his 51st year as a fire fighter. He began his service with the Portland Fire Department in 1904. In the same year, Jay W. Stevens, executive secretary of the IAFC and secretary-treasurer of the Pacific Coast Inter-Mountain Association of Fire Chiefs, began his career with the Portland Fire Department. Portland's Fire Prevention Division was established in 1914 when Jay Stevens was Fire Marshal. Chief Grenfell succeeded Stevens as Fire Marshal and attained rank of Battalion Chief in 1918. He took office as Chief of Department on January 1, 1928.

1956 Calendar

THE new 1956 fire prevention calendar of the NFPA has just been published. It is a 12 x 16 colorfully illustrated sheet which features drawings of Sparky the fire dog and Smokey the bear. It may be obtained from the NFPA executive office, 60 Batterymarch Street, Boston 10, Massachusetts, at the following prices: $1.00 for 12 copies; $5.00 for 100; $35.00 for 1,000; and successive discounts for larger quantities. When ordering, ask for JH-32F.

SAVE LIVES...
SAVE MONEY...
Bi-Lateral
FLEXIBLE
...FOLDS FLAT FASTER!
...STAYS SAFE LONGER!
WHEN YOU BUY WITH YOUR CONSCIENCE YOU'LL
Bi-Lateral®
Cheap hose is expensive in the long run—in lives as well as money! Bi-Lateral has been famous for quality since 1907—and we don't intend to endanger that reputation—or lives—by making "cheaper" hose to meet a cheaper price.
Cheap hose must be replaced in seven years—Bi-Lateral will give you twenty years of safe service.
We believe that safety and long run economy are more important than price alone in the purchase of fire hose. That's why we say, "when you buy with your conscience, you'll Bi-Lateral!"
FIRST AGAIN!
BI-LATERAL was first to construct hose with the bi-lateral non-creasing feature for longer life, lower cost in the long run and true safety. Folds flatter, handles more easily!
BI-LATERAL was first to change the pin-lugs to rocker lugs for safer, easier-handling couplings, lower-cost hose coupling maintenance.
BI-LATERAL was first to offer a real detergent, BI-KLEEN—made especially for fire-hose cleaning exclusively for Bi-Lateral by the Essentials Chemical Co. Oil and dirt rot hose—Bi-Kleen is safe, non-toxic, keeps hose "inspection-white," keeps it cleaner, safer . . . good for fire-house and apparatus, too!
AND BI-LATERAL was first to furnish free fire hose record cards to fire departments. They are still available—send for a supply!
Bi-Lateral®
20 N. WACKER DRIVE, CHICAGO 6, ILLINOIS

NATIONAL FIRE PROTECTION ASSOCIATION
60 Batterymarch Street, Boston 10, Massachusetts

Please send me complete information on how NFPA Fire Department Membership may be put to good use by my fire department.

Name .....

Address .....

City ..... State .....

Better Hose Care-with CIRCUL-AIR
HOSE CONDITIONING EQUIPMENT
WASHERS • DRYERS • TURN-TABLES • STORAGE RACKS

FIRE HOSE DRYER

The patented, electrically operated Circul-Air hose dryer circulates pre-warmed fresh air through loosely coiled hose at the rate of 5 to 6 air changes per minute. Saves floor space, hard work and lengthens hose life! No other drying method is so fast — so economical — so easy to use.

LABORATORIES APPROVED

USED IN OVER 3,000 LEADING FIRE DEPARTMENTS

Rota-Jet
FIRE HOSE WASHER

Washes, Rinses, Drains hose thoroughly and quickly. Hose is self-propelled. Simple one-man operation. With or without detergents ashes, dirt, mud and sludge are automatically scrubbed out and flushed away.

WRITE FOR NEW FOLDER
If you are planning to build or remodel, send for our brochure "Fire Station Design."

THE CIRCUL-AIR CORPORATION 575 EAST MILWAUKEE DETROIT 2, MICHIGAN

Save Money — Save Lives

"Care & Maintenance of Fire Hose"

A New Film now Approved for FCDA Matching Funds

Cut here and mail today

Gentlemen: We are interested in purchase of the new 16 mm. fire training film, "CARE AND MAINTENANCE OF FIRE HOSE," black and white, sound, 21 minutes. Prints, $100 each, including reel, can and protective vacuumating. We understand this film is approved for the Matching Funds Program of FCDA for its value in Civil Defense.

Check One: Please send further information ☐

Please send preview print, to be returned prepaid if not purchased ☐

Please send.....prints, confirmation follows ☐

FIRE-FIGHTING FILMS 304A Green Street, San Francisco 11, Calif.

New Film on Fire Hose

A 21-minute, black and white motion film titled "Care and Maintenance of Fire Hose" is now available from Fire-Fighting Films, 304A Green Street, San Francisco, California. Prepared with the cooperation of San Francisco fire fighters and other fire departments in the vicinity, the film presents some useful instruction on important training subjects concerning the proper care of fire hose.

It shows various sizes and types of hose; factory and fire department testing methods; types of mechanical and chemical injury which can affect fire hose; how to conduct hand and pumper hydrostatic tests; care, storage, and proper techniques for loading, laying, and picking up hose; and correct procedures for washing, drying, and inspecting fire hose.

Sound prints may be obtained for $100 each from the producing company at the above address. The film has been added to the list of training films for which matching funds are made available under the fire training program of the Federal Civil Defense Administration.

Fire fighters from the Menlo Park and Emeryville, California, Fire Departments, also participated in production of the film.

New Members in NFPA

British Columbia: Chief F. P. Clackson, North Cowichan Volunteer Fire Department, Duncan.

California: Bakersfield Fire Department, Bakersfield.

Connecticut: Chief W. A. Kent, Vernon Fire District, Talcottville.

Illinois: Otto Fire Protection District, Chebanse; Signal Hill Volunteer Fire Department, East St. Louis.

Indiana: Elkhart Fire Department, Elkhart; North Side Penn Twp. Fire Department, Mishawaka.

Iowa: Chief Lloyd E. Nelson, West Des Moines Volunteer Fire Department, West Des Moines.

Maryland: Beltsville Volunteer Fire Department, Beltsville.

Massachusetts: Chief W. Parent, Agawam Fire Department, Agawam; Chief William P. Hurton, Wakefield Fire Department, Wakefield.

Michigan: Bangor Fire Department, Bangor; Chief Roy Coakes, Owosso Fire Department, Owosso; Shelby Twp. Fire Department, Utica.

Nebraska: Bee Volunteer Fire Department, Bee.

New Jersey: Allenhurst Fire Company No. 1, Allenhurst; Springfield Fire Department, Springfield.

New York: Booster Hose Company No. 5½, Nyack; Plainview Volunteer Fire Department, Plainview, L.I.; Plandome Fire Department, Plandome; Chief Edward Ernhout, Warwick Fire Department, Warwick.

Oklahoma: The Village Fire Department Oklahoma City.

Quebec: Jacques Cartier Fire Department, Jacques Cartier; Chief J. A. L. Arsenault, Levis Fire Department, Levis.

Rhode Island: South Foster Volunteer Fire Company, North Scituate.

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Wausau Refers to NFPA

A PRACTICAL use of the technical standards of the National Fire Protection Association is indicated by the actions of the City of Wausau, Wisconsin, which adopted a fire prevention code in October.

The code contains the usual provisions for administration of the ordinance, empowering the fire department to inspect buildings and issue orders to eliminate fire hazards, and some sections covering general precautions against fire. Of special interest, however, may be the following section by which certain state codes and standards of the NFPA which apply are adopted by reference.

Section 1.02 — Adoption of Codes

a. The following codes of the State of Wisconsin and the National Fire Protection Association are hereby adopted by reference and made part of the City of Wausau, Wisconsin, Fire Prevention Code:

1. General Orders on Fire Prevention
2. Cleaning and Dyeing Code
3. General Orders on Existing Buildings
4. General Orders on Explosives
5. Flammable Liquids Code
6. General Order on Liquefied Petroleum Gas
7. General Orders on Spray Coating
8. In the event that the National Fire Protection Association prescribes standards not provided for by the above state codes, then those standards shall apply.

b. Official copies of each of said codes are now on file in the office of the City Clerk and the Chief of the Fire Department of the City of Wausau, and shall remain so filed and be, at all reasonable times, open to inspection by any interested person.

Occupancy Fire Records

TWO new 8-page reports of occupancy fire experience have been published by the NFPA Fire Record Department. FR55-8 "Bakeries" and FR55-9 "Gasoline Service Stations" each contain a number of reports of fires in these occupancies. Illustrations and statistical breakdowns of fire causes and recurring factors which influenced fire spread are also included, together with reference to NFPA standards which apply to bakeries and gasoline service stations. Both booklets are priced at 50 cents per copy. Discounts are allowed for quantity purchases. Ask for FR55-8 or FR55-9 when writing to NFPA.

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A Matter of Gravity

"ONWARD and upward" may have been the thought which inspired this 22-year-old Baltimore youth to climb the Nation's oldest Washington Monument in November. He had gone about two-thirds of the 240-foot height when Baltimore fire fighter, Carol Hanley, on the aerial ladder, persuaded him to climb down the lightning conductors. He dropped the last twenty feet into a net held by Baltimore fire fighters at the 24-ft. high base of the monument. (*Associated Press Wirephoto.*)

New Fire Equipment and Catalogs

Folder on Emergency Lights

A new 4-page folder on "Big Beam" automatic emergency lights has been prepared by U-C Lite Manufacturing Company, 1050 West Hubbard Street, Chicago 22, Illinois. It describes five different models of that company's emergency lighting equipment and includes suggested uses and installations. Free copies may be obtained by writing to the company at the above address and requesting Form No. AEL-655.

New Fog Nozzles

Two new types of industrial fire fighting nozzles which can vary stream pattern through all degrees of fog to straight stream have been announced by Akron Brass Company, Inc., Wooster, Ohio. No. 711 is designed especially for use on hose rack and cabinet units. Listed by Underwriters Laboratories, Chicago, Illinois, this nozzle is designed for low pressure operation. Nozzle No. 1300 is also designed for use in industrial plants. Shut-off valves of both nozzles operate in either direction. Write to the manufacturer for further information.

Radio Base Station

A multi-channel mobile radio base station, completely self-contained and providing transmission, reception and termination facilities, is being produced by Allen B. Du Mont Laboratories, Inc., 750 Bloomfield Avenue, Clifton, New Jersey. Called "MCA-351-A Base Station" it is designed to fill the requirements of a base station for a two-way frequency in the 144-174 MC band. It has accommodations for two receivers and has a power output up to 60 watts. Further information may be obtained from the manufacturer.

Contest Winner

Winner of the Wooster Brass "Name the Nozzle" Contest, advertised in the September issue of FIREMEN magazine, has been announced. (See page 3.) Miss M. C. Wipfler, associated with Ward La France Truck Corporation, Elmira, New York, won the $100 savings bond with the name "Vari-A-Fog."

New Plant for "Stop-Fire"

Stop-Fire, Inc., 125 Ashland Place, Brooklyn 1, New York, has announced construction of new plant facilities in South Brunswick, New Jersey. The firm manufactures fire extinguishers which operate on the principle of stored pressure, including Type A-20 which has chlorobromomethane as an extinguishing agent. The new plant is located on U. S. Route No. 1 at Black Horse Lane, seven miles south of New Brunswick, New Jersey.

New Fire Detection Systems

New types of fire detection systems have been announced by Notifier Manufacturing Company, 239 South 11th Street, Lincoln, Nebraska. Designated as the PN-02-AD series, the systems are listed by Underwriters' Laboratories, Chicago, Illinois, and Factory Mutual Laboratories of Norwood, Massachusetts. The systems are designed to provide automatic Class A Emergency Signaling Operation for proprietary, auxiliary or local use. Further information can be obtained from the manufacturer at the above address.

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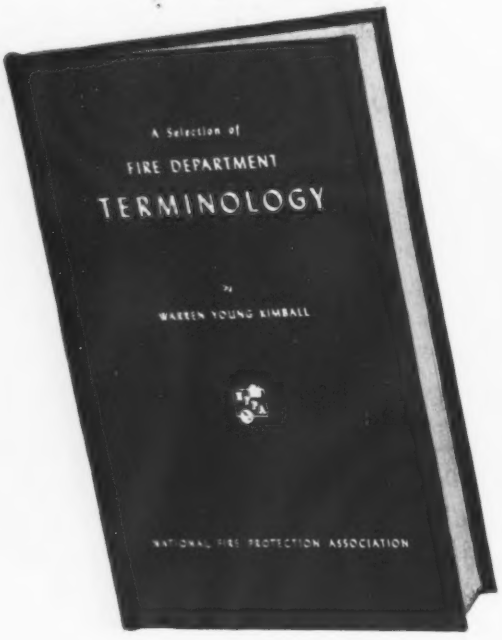

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Sample Terms

Cellar Fire. Fire involving portions of a structure below grade and considered especially dangerous and difficult to fight because of confined heat and smoke, oxygen deficiency, tendency of fire to move upward through unprotected openings, physical punishment involved in moving downward against fire, and difficulty of achieving ventilation. Self-contained breathing apparatus should be used for personnel protection at basement or cellar fires.

Dog Robber. Aide to captain on detail or investigation.

Fire Tower. A self-contained structural stair tower used as a fire escape for building occupants and as a means of access for fighting structural fires. Frequently containing a fire department standpipe riser. Also, less frequently, a fire department training tower. A fire department communications center. Occasionally, a fire department water tower truck or an aerial ladder employed as a water tower.

Phase 3, or Third Phase. Dangerous smoldering period of an interior fire when oxygen content of atmosphere has been depleted below 15% presenting likelihood of back draft or explosion of confined heated smoke and gases if fire breaks through to outside or if building is carelessly ventilated.